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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,288	01/29/2001	Yong Ho Son	DIVA/255	9276

7590 09/09/2004  
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EXAMINER

USTARIS, JOSEPH G

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 09/09/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/772,288

Applicant(s)

SON ET AL.

Examiner

Joseph G Ustaris

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 1,12,25 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4 and 5</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because Fig. 1 element 148 labeled as --AMP Server-- should be labeled as "HTTP Server" in order to be consistent with the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1, 12, 25, and 30 are objected to because of the following informalities:

- In claim 1 line 7, --uploading said transcoded content a http-- should be written as "uploading said transcoded content to a http".
- In claim 12 line 20, --RTP formatted content-- should be labeled as "IP formatted content" in order to be consistent with the independent claim. Furthermore, it is highly recommended that claim 12 should be dependent off claim 10.
- In claim 25 line 17, --RTP formatted content-- should be labeled as "IP formatted content" in order to be consistent with the independent claim. Furthermore, it is highly recommended that claim 25 should be dependent off claim 23.
- In claim 30, it is not proper for a method claim to be dependent off a system claim. It is recommended that claim 30 should be dependent off claim 27.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitations "said streaming" and "said second subscriber terminal" in lines 20-21. There is insufficient antecedent basis for this limitation in the claim. The examiner will read "said streaming" as --streaming-- and "said second subscriber terminal" as --a second subscriber terminal--.

Claim 25 recites the limitations "said streaming" and "said second subscriber terminal" in lines 17-18. There is insufficient antecedent basis for this limitation in the claim. The examiner will read "said streaming" as --streaming-- and "said second subscriber terminal" as --a second subscriber terminal--.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-20, and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets et al. (US20010013068A1) in view of Towell et al. (US006647411B2).

Regarding claim 1, Klemets et al. (Klemets) discloses a system for steaming multiple multimedia streams for synchronized transmission over a computer network for a video-on-demand (VOD) system that performs the method of "preprocessing content for a stream caching server in an interactive information distribution system" (See Fig. 2 and 3A). The method includes "retrieving content in a first subscriber terminal" (See Fig.

2 Production Station; paragraph 0044) and inherently “encapsulating content in accordance to an Internet Protocol (IP) format” in order to successfully “upload the content to a http server coupled to an access network” (See Fig. 2 stream server and Internet). However, Klemets does not disclose a method for (1) “transcoding retrieved content into a plurality of MPEG packets” and (2) “transmitting encapsulated content for storage in a stream caching server”.

(1) Klemets does disclose that the retrieved multimedia data or “content” is compressed (See paragraphs 0045 and 0046). Official Notice is taken that it is well known to compress data into a “plurality of MPEG packets” or “transcode content into a plurality of MPEG packets”. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the production station and producer software disclosed by Klemets to “transcode” multimedia data “into a plurality of MPEG packets” in order to provide data that adheres to a well established and used compression thereby increasing the compatibility with other systems.

(2) Towell et al. (Towell) discloses a secure cached subscription service for use within a VOD system. The system includes a caching device or “caching server” that is able to store movies or television shows that are most likely to be requested by a user. The movies and television shows are downloaded from a content provider or “transmitting encapsulated content for storage in a stream caching server” (See Fig. 1A and Fig. 3; column 3 line 63 – column 4 line 13). Furthermore, the caching device can be implemented in various networks (See column 3 lines 46-51), wherein the use of IP protocol is well known in the art. Therefore, it would have been obvious to one with

ordinary skill in the art at the time the invention was made to modify the VOD system disclosed by Klemets to incorporate an additional caching device or “stream caching server” to store and stream the “transmitting encapsulated content”, as taught by Towell, in order to reducing the amount of time it takes to respond to a user’s request for video data.

Regarding claim 2, Klemets in view of Towell also disclose that the production station uses producer software to perform the functions of “initiate said retrieving, said transcoding and said uploading” (See Klemets Fig. 3A; paragraph 0043-0046). However, Klemets in view to Towell does not disclose “downloading an applet to first subscriber terminal from a http server”.

Klemets does disclose a method where terminals are inherently able to download modules or “applets” from a server and install the module within a web browser (See Klemets paragraphs 0059 and 0060). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the production station, producer software and stream server or “HTTP server” disclosed by Klemets in view of Towell to be able to “download an applet to first subscriber terminal from a http server”, as taught by Klemets, in order to provide an easy means to expand and easily upgrade the software thereby providing the latest software for the user.

Regarding claim 3, Klemets in view of Towell further discloses that users of the client machine is able to skip forward or backwards to predetermined locations in the video/audio streams (See Klemets paragraph 0071), where inherently the VOD system creates “metadata comprising indexing information used by stream caching server in

response to a command provided by a user viewing said content at a second subscriber terminal" in order to successfully carry out the user's command (See Klemets Fig. 2 client computer). However, Klemets in view of Towell does not disclose that the "metadata is uploaded with the content".

Official notice is taken that it is well known to upload additional data, i.e. "metadata", with the multimedia data. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the multimedia streams of the VOD system disclosed by Klemets in view of Towell to "upload metadata with the contents" in order to provide all the information needed for the video data thereby reducing the time it takes the VOD system to respond to requests and commands from the user.

Regarding claim 4, Klemets in view of Towell does not disclose that the "metadata is encapsulated with transcoded content in IP format".

However, Klemets does disclose that the additional data, i.e. annotation streams, can be combined with the video and audio streams or multimedia data or "metadata is encapsulated with transcoded content" (See Klemets paragraph 0073), which is inherently in IP format in order to be successfully sent through the Internet (See Klemets Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the IP packets and multimedia data disclosed by Klemets in view of Towell to include "metadata that is encapsulated with transcoded content in IP format", as taught by Klemets, in order to provide a more efficient means of transporting data to the server.



Regarding claim 5, the client computer allows the users to submit "commands" that skip forward or "fast forward" and backwards or "rewind" by use of a table of contents that inherently makes use of "bookmarks" (See Klemets paragraph 0071).

Regarding claim 6, the retrieved multimedia data or "content" by the production station is an AVI file (See Klemets paragraph 0044).

Regarding claim 7, the "plurality of MPEG packets" disclosed by Klemets in view of Towell are inherently placed in the payload of an IP packet in order to be successfully sent through the Internet (See Klemets Fig. 2, Internet).

Regarding claim 9, Klemets in view of Towell does not disclose that the "plurality of MPEG packets comprises a plurality of one of a MPEG-2 packet and a MPEG-4 packet".

Official Notice is taken that is well known to use MPEG-2 and MPEG-4 packets. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the MPEG packets disclosed by Klemets in view of Towell to be MPEG-2 or MPEG-4 packets in order to provide data that adheres to a well established and used compression thereby increasing the compatibility with other systems.

Regarding claim 10, the "IP formatted content is retrieved from" the caching device (See Klemets Fig. 2 and Towell Fig. 1A and Fig. 3), which is inherently "in response to a request for content from a second subscriber terminal" (See Klemets Fig. 2, client computer), and is streamed via Internet that serves as a "distribution network"

and as well as a "access network to second subscriber terminal" (See Klemets Fig. 2; Servers, Internet, and client computer).

Regarding claim 11, Klemets in view of Towell further disclose that the caching device or "stream caching server" can request a movie, which is inherently "IP formatted content" in order to be sent through the Internet (See Klemets Fig. 2 and Towell column 3 lines 47-51), to be downloaded from the content provider or stream server and stored on the caching device or "IP formatted content is retrieved from said streaming cache server in response to a request for content from another stream cache server, and streamed to from said caching server to that other caching server" (See Towell Fig. 1A and Fig. 1B; column 4 lines 3-5 and 18-21).

Regarding claim 12, Klemets in view of Towell further disclose that retrieving and streaming the movies or also known as "content" is only allowed if the "user of a second subscriber terminal" provides a correct password to the content provider or stream server or "HTTP server" (See Towell column 6 lines 35-47), where inherently the user identification and password are "configured" by an operator of the content provider or designer of the production station or "by a user of said first subscriber terminal" (See Klemets Fig. 2, designer and production station).

Regarding claim 13, the "access network" is a local area network or a wide area networks (See Klemets paragraph 0008).

Claim 14 contains the limitations of claim 1 (wherein the production station is the "first subscriber terminal" and also serves the function of a "digital link") and is analyzed as previously discussed with respect to that claim.

Claim 15 contains the limitations of claims 2 and 14 (where the producer software provides a “user interface” (See Klemets Fig. 7)) and is analyzed as previously discussed with respect to those claims.

Claim 16 contains the limitations of claims 2 and 15 and is analyzed as previously discussed with respect to those claims.

Claim 17 contains the limitations of claims 3 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 18 contains the limitations of claims 4 and 17 and is analyzed as previously discussed with respect to those claims.

Claim 19 contains the limitations of claims 5 and 17 and is analyzed as previously discussed with respect to those claims.

Claim 20 contains the limitations of claims 7 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 22 contains the limitations of claims 9 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 23 contains the limitations of claims 10 and 15 and is analyzed as previously discussed with respect to those claims.

Claim 24 contains the limitations of claims 11 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 25 contains the limitations of claims 12 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 26 contains the limitations of claims 13 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 27 contains the limitations of claims 1 and 2 (wherein the system performs the method and the production station is also considered the "client") and is analyzed as previously discussed with respect to those claims.

Regarding claim 28, Klemets in view of Towell does disclose an authentication device that is able to authenticate a user to see if the user has access to the movies stored on the server as discussed in claim 12 above. However, Klemets in view of Towell does not disclose "uploading to server access rights associated with encapsulated data".

Official Notice is taken that it is well known to upload "access rights" for content stored on the server. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the VOD system and servers disclosed by Klemets in view of Towell to "upload to server access rights associated with encapsulated data" in order to provide a means for the provider to protect their data from unauthorized users and illegal use.

Regarding claim 29, Klemets in view of Towell disclose that the "access rights" is a "password protection scheme" as discussed in claim 12 above (Also See Towell column 6 lines 35-47).

Claims 8, 21, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets et al. (US20010013068A1) in view of Towell et al. (US006647411B2) as

applied to claims 1-7, 9-20, and 22-29 above, and further in view of Mimura et al. (US006557031B1).

Regarding claim 8, Klemets in view of Towell does not disclose that the "plurality of MPEG packets is contained in a payload of a Realtime Transfer Protocol (RTP) packet contained in a payload of an IP packet".

Mimura et al. (Mimura) discloses a system for streaming video data. Mimura discloses that it is well known to encapsulate multiple MPEG packets within a RTP packet that is contained in the payload of an IP packet (See Fig. 11 and column 2 lines 28-54). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the VOD system, MPEG packets, and IP packets disclosed by Klemets in view of Towell to have the "plurality of MPEG packets contained in a payload of a Realtime Transfer Protocol (RTP) packet contained in a payload of an IP packet", as taught by Mimura, in order to prevent degradation of resolution of the video data caused by transmission delay.

Claim 21 contains the limitations of claims 8 and 20 and is analyzed as previously discussed with respect to those claims.

Claim 30 contains the limitations of claims 1 (wherein the multimedia data is encapsulated in an IP format adapted for the Internet), 8 (wherein the multimedia data is within a RTP packet contained in a IP packet), and 26 and is analyzed as previously discussed with respect to those claims.

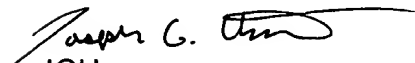
**Conclusion**


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please take note of Wahl (US005898456A) for his similar method of transferring data between two servers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G Ustaris whose telephone number is 703-305-0377. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JGU  
September 3, 2004

  
VIVEK SRIVASTAVA  
PRIMARY EXAMINER